ENVIRONMENTAL CHEMISTS

Date of Report: 08/23/04 Date Received: 08/06/04

Project: Metro Self Monitor, PO# M104647, F&BI 408057

Date Extracted: 08/17/04 Date Analyzed: 08/17/04

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID Laboratory ID		<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M104647		0.45	0.68	0.45	0.21
408057-01					
Method Blan	ık	<0.05	<0.05	<0.10	<0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 08/23/04 Date Received: 08/06/04

Project: Metro Self Monitor, PO# M104647, F&BI 408057

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 408120-01 (Duplicate)

					Kelativ	⁄e	
		Reporting	Sample	Duplicat	te Percer	it Accep	tance
Analyte	" no Yan	Units	Result	Result	Differer	ice Crit	eria
Chromium	J. San Y	mg/L (ppm)	0.31	0.31	0	0-	20
Copper		mg/L (ppm)	0.29	0.25	15	0-	20
Nickel	3.34	mg/L (ppm)	0.15	0.14	7	0-	20
Zinc		mg/L (ppm)	< 0.05	< 0.05	nm	0-	20
	Chromium Copper Nickel	Chromium Copper Nickel	Analyte Units Chromium mg/L (ppm) Copper mg/L (ppm) Nickel mg/L (ppm)	Analyte Units Result Chromium mg/L (ppm) 0.31 Copper mg/L (ppm) 0.29 Nickel mg/L (ppm) 0.15	Analyte Units Result Result Chromium mg/L (ppm) 0.31 0.31 Copper mg/L (ppm) 0.29 0.25 Nickel mg/L (ppm) 0.15 0.14	Reporting Analyte Sample Units Duplicate Result Percent Different Chromium Mg/L (ppm) 0.31 0.31 0 Copper Mg/L (ppm) 0.29 0.25 15 Nickel Mg/L (ppm) 0.15 0.14 7	Analyte Units Result Result Difference Crit Chromium mg/L (ppm) 0.31 0.31 0 0- Copper mg/L (ppm) 0.29 0.25 15 0- Nickel mg/L (ppm) 0.15 0.14 7 0-

Laboratory Code: 408120-01 (Matrix Spike)

						2.7	Percent	t	Percen	t			
À,	.54 TN 457		Reporting	Spik	e Sample	;	Recover	\mathbf{y}	Recover	y	Acceptance	e RP	D
	Analyte	e a a a a a	Units	Leve	el Result		MS	9.8	MSD	1.0	Criteria	(Limit	20)
٩.	Chromium		mg/L (ppm)	5	0.31	* * ;	92		86		50-150	7	
	Copper		mg/L (ppm)	5	0.29		95		92		50-150	3	
	Nickel		mg/L (ppm)	10	0.15	11	92		86		50-150	7	
	Zinc		mg/L (ppm)	5	< 0.05	14	100		92	5 172	50-150	8	

Laboratory Code: Laboratory Control Sample

	NE LA CALLA		Percent	Percent				
JG: 1451 [AC	Reporting	Spike	Recovery	Recover	y	Acceptance	e RPI)
Analyte	Units	Level	LCS	LCSD	Tage (F	Criteria	(Limit	20)_
Chromium	mg/L (ppm)	5	104	103	Tall and Tall	70-130	1	7747
Copper	mg/L (ppm)	5	100	99		70-130	1	
Nickel	mg/L (ppm)	10	101	103		70-130	2	100
Zinc	mg/L (ppm)	5	105	104		70-130	1.	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

408057			SAM	IPLE CHA	IN OF C	JST	OD	Y		CM	0	8/01	6/9	ο¥	_				#T
Send Report To G. To Company Alberta S. Address 628 S.	1 000		ſ	SAMPLERS	signature)] ,			#	ROUND	of	<u></u>
Send Report To G.	nonfrom			PROJECT N.	MENIO						PO#		$\{\ \}$	□ St			ROOND Weeks		, en
Company DURKA	Spen	Voile	<u> </u>	Metro S	Talf M	٠, ٠	۱.			m				□ RI	JSH_		authori		
Address 628 S.	Danter	1 80		7' 180/10 5	se10 / 1	~	VOF	(104	644		Rusi					
City, State, ZIP Seatt	ce us	5873	74	REMARKS							*	rets		п Di			E DISP er 30 de		i,
Phone # 2016-382-83	H For # 7	36-78	dre											□ Re	eturn	sam			
Fnone # 2 0 300 00	" rax #_ <u>C</u>	36 7.6	ا بمرد										J			II WI	th mstr	uctions.	
				1			. т	<u></u>	Ť	ANAL	YSES	REQ	UE	STEL) T	_			
						sel	line	BTEX by 8021B	3260	SVOCs by 8270	1								
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	-Die	Gasc	by 8	by 8	s by	뙤 3	1				١	1	Notes	
					Contamers	TPH-Diesel	TPH-Gasoline	LEX	VOCs by 8260	700	7	3							90 0
				1 7 6	<u> </u>		T	B,	>	S	13	X _	_	_	_	_			
m 104647	01	8/404	10:15	tho	/						12	4							
1											1								
						T					\top		\top	十	1				
											+	+	+		\dashv	\neg			E7
			<u> </u>			-					-	+	+	_					
						L							_	_					
	•																		
													1						
			 			\dagger	+-			\vdash		+	\dashv	_					
Friedman & Bruya, Inc.		SIGNATO	HPF		PRIN'	ΓNA	ME	<u></u>	,	ᆛ		COM	PΑ	NV		Т	DATE	Т	IME
	Relinguished			< C	Thou							2				1	Ma	10	1.320
Seattle, WA 98119-2029	Received by:	and	70.0		1 00	Kan				1	/	man	\$	2.		18	6/01	0 /	1/27
Ph. (206) 285-8282	Relinquished b		aw	10	, w 11	<u>, ω</u>	<u>~~</u>		ļ.	$\dashv^{\mathcal{I}}$	neg	<u> </u>	工	<u>D</u>	7	+	-U/ U2	- //	
Fax (206) 283-5044	Received by:	· · ·	<u> </u>							1	A 100					T	······································	+-	

FORMS\COC\COC.DOC

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 23, 2004

DUPLICATE COPY

INVOICE # 04ACU0823-2

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M104647, F&BI 408057 - Results of testing requested by Gerry Thompson for material submitted on August 6, 2004.

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 23, 2004

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on August 6, 2004 from the Metro Self Monitor, PO# M104647, F&BI 408057 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Charlens Morrow

Charlene Morrow

Chemist

Enclosures ACU0823R.DOC